RadioShack®
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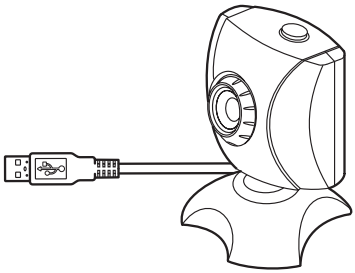
PC Camera

OWNER'S MANUAL —
Please read before using this equipment.

25-3121



PC CAMERA

Introduction

Thank you for purchasing the RadioShack PC Camera. Your camera is designed for PCs that have a universal serial bus (USB) port. You can use the camera to make videos, capture still images, post live video, chat, produce still pictures, and post video clips to the World Wide Web. With the supplied fun-to-use application software, your camera is a powerful addition to your PC.

Camera Features

USB Operation — lets you easily make connections and begin using the camera. The camera uses the power provided through the USB bus directly from your computer so no batteries are needed.

CMOS Sensor — provides high quality video images.

640 x 480 Pixels Color Resolution — provides excellent video quality.

Snapshot Button — lets you freeze any image captured by your camera.

Auto Mode Control — the supplied software lets you set the USB bandwidth and exposure speed manually or automatically for the camera.

Auto White Balance Control — changes the color image automatically or manually to your preference.

Backlight Compensation — the camera automatically compensates for poor image backlighting.

Edge Enhancement — the camera automatically provides clearer and sharper images.

! IMPORTANT !

If an icon appears at the end of a paragraph, go to the box on that page with the corresponding icon for pertinent information.

! — Important **— Note**
— Hint

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Supplied Software

WDM (Windows Device Model) iCam322 TWAIN (Technology Without An Important Name) for Windows 98/2000/Me/XP — lets you capture and transfer images from the camera to image editing programs such as *Adobe PhotoShop, MGI PhotoSuite* or *Corel*.

Presto Application Software — helps you create and manage your video and photo archives.

Ulead Photo Explorer — a perfect image viewer and image management tool for programs such as *Microsoft Front Page* or *Netscape Navigator Gold*, and a perfect image editor for programs such as *Adobe PhotoShop* and *PhotoDeluxe*, *JASC PaintShop Pro*, and *Microsoft Picture It*.

Package Contents

- PC Camera
- Setup/Application Software in CD ROM
- Owner's Manual
- Quick Start

SYSTEM REQUIREMENTS

- IBM® PC Pentium 266 MHz or compatible with one available USB port
- CD-ROM drive
- VGA or SVGA monitor
- 32MB or more of available internal memory (RAM)
- 150MB of free hard disk space
- *Microsoft Windows® 98, Windows® 98/SE, Windows 2000, Windows Me, Windows XP* **!**

! IMPORTANT !

- Your camera will not work with *Windows 95*. You must have *Windows 98, Windows 98 SE, Windows 2000, Windows Me, or Windows XP* installed on your computer to use the camera.
- Some software features might not work correctly on computers running *Windows 98* First Release. For best compatibility, upgrade to *Windows 98 SE* or later.

To avoid installation problems, install the supplied *iCam 322 TWAIN driver* before connecting the camera to your PC. Before installing the driver software, have your original Windows CD handy (this is not necessary if the Windows installation files are located on your hard drive). When an *Insert Disk box* appears while you are installing the driver software, insert the CD and click **OK**.

If you have *Windows 98* installed, a *Version Conflict box* appears. Click **Yes** to keep the file.

APPLICATION SOFTWARE

Your camera comes with a CD-ROM that includes the drivers you need to operate the camera, as well as these applications. You can install the applications you want when you install the drivers. (See “Installing/Testing the Software/ Hardware” on Page 4.)

iCam322 TWAIN Drivers and Utility — lets you use an image editing program, such as *Adobe PhotoShop*, *MGI PhotoSuite*, or *Corel*, to use the camera and all of the program's functions.

Adobe Acrobat Reader 5.05 — a program which lets you read documents and material prepared in the popular .pdf format. The software is included in the folder AcrobatReader 505 in the supplied CD.

Presto! Image Folio 4.2 — a complete multi-media image processing program which lets you quickly create new images or enhance old ones.

Presto! Mr. Photo 3.2 — a single package solution that lets you work with digital images, create images, use other applications with images, transmit images over the Internet, and more.

Presto! VideoWorks 4.5 — a quick and easy video editing program that lets you create live presentations.

Ulead Photo Explorer 6.0 — a perfect visual front end for *Microsoft Front Page*, *IE 6.0*, *Netscape Navigator Gold*, or almost any other image editor.

Internet Explorer 6.0 — brings you an easy, consistent,and organized way to explore the Web and find information you need through your local area network or the Internet. The software is included in the folder IE60 in the supplied CD.

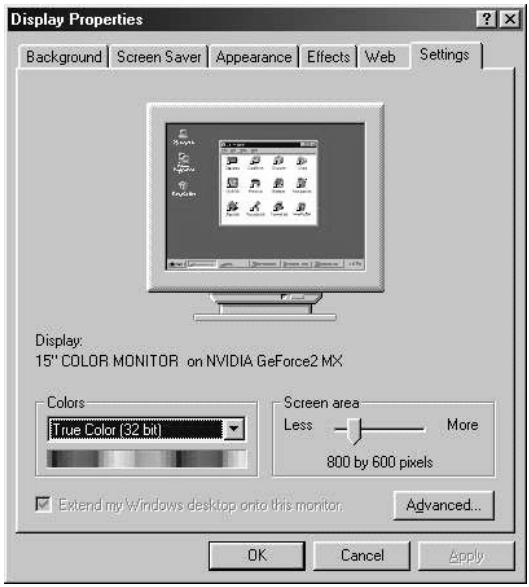
NOTE

For information about *Presto!* applications, refer to their user's manuals included in the supplied CD-ROM (at *Start/Programs/ Presto!* (application name)/ (application name) User's Manual).

PREPARATION

CONFIGURING THE MONITOR

1. Open the *Windows Control Panel*, double-click **Display**, then click **Settings**.



2. Set *Color* to **High Color (16-bit)** or **True Color (24- or 32-bit)**. (For the best display, we recommend True Color).

3. Set *Screen* area to at least **800 x 600 pixels**.

INSTALLING/TESTING THE SOFTWARE/HARDWARE

The driver software and application software supplied with the camera are included in the supplied CD-ROM. It includes a Setup Wizard that makes installation easy. **!**

Follow these steps to install the software, connect the camera to your computer, and test the camera and software together.

1. Start Windows and quit all applications.

2. Insert the supplied software CD into your CD-ROM drive. The CD starts automatically.

! IMPORTANT !

- The steps in this section show you how to install the software using Windows 98. If you have Windows 98 SE, Windows 2000, Windows Me, or Windows XP, the steps might differ. Follow the prompts you see while using Windows 98 SE, Windows 2000, Windows Me, or Windows XP to install the software.
- Do not aim the camera directly at a light source.

NOTE

- If the CD does not start automatically, make sure the CD-ROM's door is completely shut. If the CD still does not start, the auto run option on your computer might be turned off. If this happens, click **My Computer**. The window shows the available drives on your computer. Then double-click the icon for your CD-ROM drive and double-click **setup.exe**. The CD starts and the *Select Components* screen appears.

3. Select the **TWAIN Drivers and Utility** and the application software you want to install on your system. Then click on the **Next** button to start the installation.

4. Follow the prompts to install the driver and software for any or all of the applications listed under “Select Components” from the CD-ROM. Follow the instructions provided with the application software to install it.

5. After you finish installing the software, restart your computer.

6. Plug the PC camera's USB connector into your computer’s USB port.

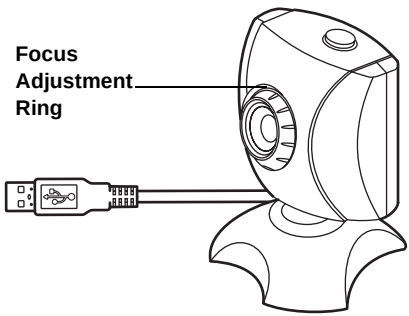
7. To confirm that the camera is operating properly when you first install it, click **Start** on the task bar, then click **Programs**, ***Presto! Mr. Photo 3.2***. The *Mr. Photo application 3* software runs.

8. Place the camera on a steady and level surface, and then slowly rotate the camera so it aims at the target image.

9. Place a light source behind the camera, facing the subject.

10. Click the snapshot button on the top of the camera. The *iCam322* window opens and you see the image captured by the camera within the *iCam322* window.

11. To adjust the focus of the image you see, simply turn the focus adjustment ring on the front of the camera in either direction until you see the clearest image.



Uninstalling the Software Driver

If you need to uninstall the driver, go to and click on **Control Panel** then double click **Add/Remove Programs**. Select the

NOTES

- Some subsequent steps in this section assume that you installed the *Presto! Mr. Photo 3.2* application software. If you did not install this application software, the screens you see might differ from those documented here.
- The cable fits only one way. If it does not fit, do not force it. Turn it over and try again.
- Refer to your computer's owner's manual for the location of the USB port.

HINT

For better images, maintain a consistent lighting environment. Do not mix fluorescent and other light types.

driver for your camera, click **Add/Remove**. (See “Installing/ Testing the Software/Hardware” on Page 4).

SOFTWARE OPERATION

USING ICAM322 TWAIN TO ACQUIRE IMAGES

Use the camera with the supplied *ICAM322 TWAIN* application software and the supplied image editing program, other image editing programs, or other programs that can accept images to acquire pictures. Any program that supports *TWAIN* can access the camera and make full use of its functions. These programs include *Presto! Mr. Photo*, *MGI Photo-Suite*, *Adobe PhotoShop*, *CorelDraw*, *Ulead Photo Explorer*, *MetaCreation Painter*, *Adobe PhotoDeluxe*, *Ulead PhotoImpact*, *NewSoft Presto! PageManager*, and so on.

This section describes the *iCam322 TWAIN* interface in detail and explains all the camera settings.

NOTE

The steps in this section are general descriptions of actions you can take to use your camera's commands. The screens you actually see might differ from those documented here.

Using Camera Commands

After you install the camera and software, follow these steps to find and use the camera commands.

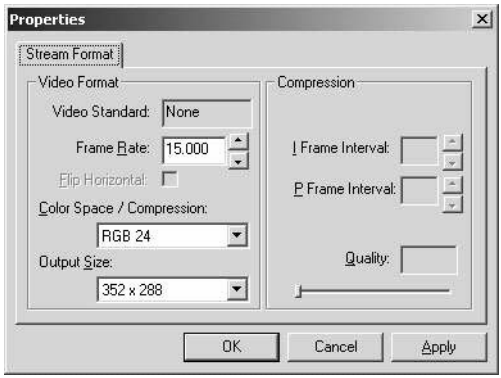
1. From the application software you are using, select *iCam322* as the source.

2. From the application software you are using, acquire the camera. The *iCam322 TWAIN* window opens and you see the image captured by the camera.

Image Format Settings

You can choose different image sizes, depending on your monitor's display size. The application software offers five image size choices. Select lower image sizes for low-resolution images or high image sizes for high resolution images.

To change the image size, click on **Output Size** on the *Properties* window. The *Properties screen* appears.



Color Space/Compression — Your camera can work with video images that are processed with characteristics called color space and compression. Your camera's default color space/compression setting is **RGB24**. Advanced users can adjust this value to **I420**, or **RGB24**.

Output Size — Your camera's default image size setting is 320 x 240, but you can adjust this value to **160 x 120**, **176 x 144**, **352 x 288**, or **640 x 480**.

Capturing and Transferring Images

Once you open the *TWAIN* window, the process used to capture and transfer images is the same, regardless of the application software you used with your camera.

1. Start the application software you want to use to capture and transfer images.
2. Use the application software you chose to scan a new picture. The target image appears.
3. To capture an image, press the snap-shot button on top of the camera or click on **Capture** on the *iCam322 TWAIN* window. The camera freezes the image and displays it under *Video box* of the *iCam322* window.

NOTE

- The frame rate will be automatically adjusted for optimum exposure. Manual adjustment is not available on this model.
- The larger the image size you choose, the more memory space it occupies and the longer the file takes to transfer.
- Depending on the application software you use to capture and transfer images, the steps you use might be different than these steps.

4. To take more than one photo or directly transfer an image to an application, click **Delay** on the screen, then click the related button.

   The *Setup Self Time* dialog box appears.

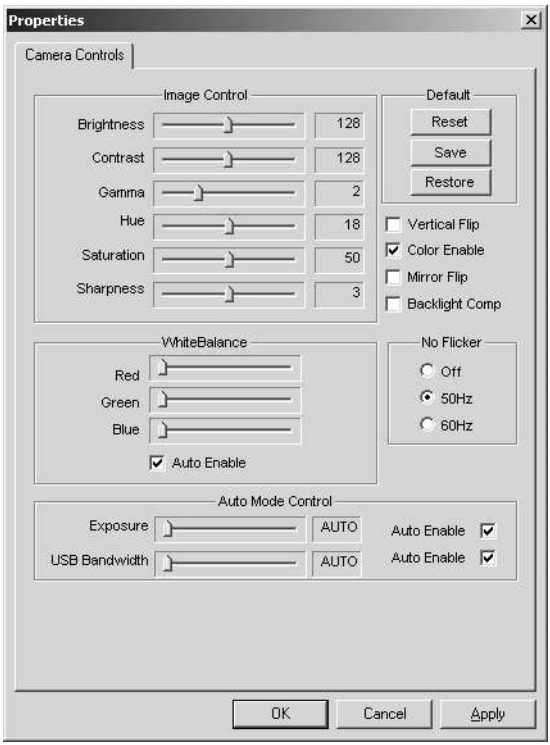
5. To adjust a photo's quality to your preference, click **Settings** on the *iCam322 TWAIN* window. Then adjust the video setting (See “Adjusting the Video Setting” on Page 9. Or, click **Format** to adjust the photo's image size.

6. To transfer a photo to your application software for future editing or posting, click the photo on the top of the screen, then click **Transfer**. The photo you selected is transferred to your application software.

7. To return to the *TWAIN* -compliant application software, click **Close**.

ADJUSTING THE VIDEO SETTING

To adjust your camera's video settings, click on Settings on the *iCam322 TWAIN* window. The *Properties* screen appears.



Brightness and Contrast — Your camera comes with an intelligent light sensor that automatically adjusts the light source's brightness according to your environment's ambient light. You can also slide **Brightness** and **Contrast** (also known as tone correction) according to the way your environment is lit.

Gamma — Slide **Gamma** to adjust the degree of contrast in the color that you see to your preferences.

Hue — Slide **Hue** to adjust the gradation of the colors that you see to your preferences.

Saturation — Slide **Saturation** to adjust the image's color intensity. The higher the saturation level (up to 20), the greater the color intensity. If you adjust the saturation level to 0 (zero), the image appears in gray scale.

Sharpness — Slide **Sharpness** to adjust the image's clarity to decrease the blurs in the image.

White Balance — Your camera automatically adjusts the color you see (called white balance) according to the ambient light in your environment. To turn off auto white balance, uncheck **Auto Enable**. You can slide **Red**, **Green**, or **Blue** to adjust the white balance you see through the camera.

Exposure

Your camera's default *Exposure* is *Auto Enable*. To disable *Auto Exposure*, uncheck **Auto Enable**, then slide the **Exposure** amount to your preference.

USB Bandwidth

Your camera and other USB devices connected to your computer use differing amounts of bandwidth (an amount of information per unit of time) as they work with the computer. The USB controller in your computer has a fixed amount of bandwidth, which all attached USB devices must share.

Your camera's default bandwidth setting is *Auto Enable*. To disable *Auto USB Bandwidth*, uncheck **Auto Enable**, then slide the **USB Bandwidth** to your preference.

Default Settings:

- **Reset:** reset to the initial default value.
- **Save:** save the settings to your preferences.
- **Restore:** restore the previously saved values.

No Flicker:

- Select **OFF**
- Select **Band 50Hz** if your AC power source's frequency is 50Hz
- Select **Band 60Hz** if your AC power source's frequency is 60Hz (most AC power in the United States is 60Hz)

TROUBLESHOOTING

This section provides information about maintaining the camera and helping you solve problems you might encounter while using it. If you continue to experience problems, or the problem you have is not covered in this manual, contact your local RadioShack store.

Problem	Suggestion
The camera does not work.	Make sure the camera is connected correctly to the computer.
No capture device found appears.	• Make sure the camera is connected correctly to the computer. • Locate the camera in the *Windows Control Panel*, double click **Multimedia**, click **Devices**, then select **Video Capture Devices**. If the camera is not listed, unplug the camera, plug it in again, and reinstall the driver. (See “Installing/Testing the Software/Hardware” on Page 4) If the camera is listed but other cameras are also installed, disable all cameras, enable the camera, then try again • To uninstall the driver, go to **Control Panel**, double click **System**, click **Device Manager**, and select **Image Devices**. Select the driver for your camera, click **Remove**, then reinstall the driver (see “Installing/Testing the Software/Hardware” on Page 4).
Camera not directed appears.	• Unplug the camera then plug it back in. Then restart your computer. • Reinstall the software
Image display window appears black, blue, green, or no image appears.	Make sure the camera is connected correctly to your computer and the lens is clean and not obstructed by other objects.
No camera image or no motion in video.	Unplug the camera then plug it back in. Then restart your computer.
After installing the camera software, the software does not detect the camera.	Some computers are shipped without the USB port mode enabled. To enable the USB port, you must run your computer’s *CMOS* setup program. This setup program is only available when you power up the computer. Since the procedure is different for each system, refer to your computer’s owner’s manual for details. If your computer has more than one USB port, try plugging the camera into a different port and unplug any unnecessary USB devices.
Blurred video/still image.	• Adjust the focus (See “Installing/Testing the Software/ Hardware” on Page 4). • Use the application software to adjust the sharpness setting.
Camera software stops working after installing other application programs.	Installing other applications sometimes changes the computer's system registry so that the camera no longer works. If this happens, reinstall the camera's driver (see “Installing/Testing the Software/Hardware” on Page 4).

If you have any questions regarding the bundled application software, contact the respective software companies listed in the software's owner's manuals.

CARE

Keep the camera dry; if it gets wet, wipe it dry immediately. Use and store the camera only in normal temperature environments. Handle the camera carefully; do not drop it. Keep the camera away from dust and dirt, and wipe it with a damp cloth occasionally to keep it looking new.

SERVICE AND REPAIR

If your camera is not performing as it should, take it to your local RadioShack store for assistance. To locate your nearest RadioShack, use the store locator feature on RadioShack's website (www.radioshack.com), or call 1-800-The Shack (843-7422) and follow the menu options. Modifying or tampering with the camera's internal components can cause a malfunction and might invalidate its warranty and void your FCC authorization to operate it.

FCC DECLARATION OF CONFORMITY

This device complies with Part 15 of the *FCC Rules*. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Product:	PC Camera
Model:	25-3121
Responsible Party:	RadioShack 100 Throckmorton Fort Worth, TX 76102
Phone:	817-415-3200

THE FCC WANTS YOU TO KNOW

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the *FCC Rules*. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications.

However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult your local RadioShack store or an experienced radio/TV technician for help.
- If you cannot eliminate the interference, the FCC requires that you stop using your PC Camera.

Changes or modifications not expressly approved by RadioShack may cause interference and void the user's authority to operate the equipment.

NOTES

Limited Ninety-Day Warranty

This product is warranted by RadioShack against manufacturing defects in material and workmanship under normal use for ninety (90) days from the date of purchase from RadioShack company-owned stores and authorized RadioShack franchisees and dealers. EXCEPT AS PROVIDED HEREIN, RadioShack MAKES NO EXPRESS WARRANTIES AND ANY IMPLIED WARRANTIES, INCLUDING THOSE OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, ARE LIMITED IN DURATION TO THE DURATION OF THE WRITTEN LIMITED WARRANTIES CONTAINED HEREIN. EXCEPT AS PROVIDED HEREIN, RadioShack SHALL HAVE NO LIABILITY OR RESPONSIBILITY TO CUSTOMER OR ANY OTHER PERSON OR ENTITY WITH RESPECT TO ANY LIABILITY, LOSS OR DAMAGE CAUSED DIRECTLY OR INDIRECTLY BY USE OR PERFORMANCE OF THE PRODUCT OR ARISING OUT OF ANY BREACH OF THIS WARRANTY, INCLUDING, BUT NOT LIMITED TO, ANY DAMAGES RESULTING FROM INCONVENIENCE, LOSS OF TIME, DATA, PROPERTY, REVENUE, OR PROFIT OR ANY INDIRECT, SPECIAL, INCIDENTAL, OR CONSEQUENTIAL DAMAGES, EVEN IF RadioShack HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.

Some states do not allow limitations on how long an implied warranty lasts or the exclusion or limitation of incidental or consequential damages, so the above limitations or exclusions may not apply to you.

In the event of a product defect during the warranty period, take the product and the RadioShack sales receipt as proof of purchase date to any RadioShack store. RadioShack will, at its option, unless otherwise provided by law: (a) correct the defect by product repair without charge for parts and labor; (b) replace the product with one of the same or similar design; or (c) refund the purchase price. All replaced parts and products, and products on which a refund is made, become the property of RadioShack. New or reconditioned parts and products may be used in the performance of warranty service. Repaired or replaced parts and products are warranted for the remainder of the original warranty period. You will be charged for repair or replacement of the product made after the expiration of the warranty period.

This warranty does not cover: (a) damage or failure caused by or attributable to acts of God, abuse, accident, misuse, improper or abnormal usage, failure to follow instructions, improper installation or maintenance, alteration, lightning or other incidence of excess voltage or current; (b) any repairs other than those provided by a RadioShack Authorized Service Facility; (c) consumables such as fuses or batteries; (d) cosmetic damage; (e) transportation, shipping or insurance costs; or (f) costs of product removal, installation, set-up service adjustment or reinstallation.

This warranty gives you specific legal rights, and you may also have other rights which vary from state to state.

RadioShack Customer Relations, 200 Taylor Street, 6th Floor, Fort Worth, TX 76102

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Fort Worth, Texas 76102

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